

What is claimed is:

1 1. An information processing device configured with at
2 least one interface section enabling a wake-up instruction
3 for starting up operationally stopped functional units in a
4 power-off state or a suspend state, a man-machine interface,
5 a memory, and a processor, connected by a chipset having a
6 bus control function, the information-processing device
7 characterized in that:

8 operational mode for the functional units when started
9 up from either said power-off state or said suspend state
10 being a normal operational mode use-enabling the functional
11 units in their entirety including the man-machine interface,
12 and an exclusive operational mode use-enabling some of the
13 functional units on starting up from either said power-off
14 state or said suspend state, including said interface
15 section having executed a wake-up instruction, said memory,
16 said processor and said chipset; wherein

17 said normal operation mode and said exclusive
18 operational mode are selected between by said interface
19 section having executed a wake-up instruction; and

20 when said exclusive operational mode is
21 terminated, the information-processing device goes to
22 its pre-start-up state, either said power-off state or
23 said suspend state.

2. An information-processing device as set forth in claim 1, characterized in that data changed in the exclusive operational mode and data change recognition flags indicating data has been changed are stored in a predetermined memory area different from a memory area for storing data used in the normal operation mode.

3. An information-processing device as set forth in claim 1, characterized in that:
start-up time is shorter and power consumption is lower for said exclusive operational mode than for said normal operational mode; and further
said normal operation mode and said exclusive operational mode are started up selectively or exclusively.

4. An information-processing device as set forth in claim 1, characterized in being configured to select the exclusive operational mode, and to supply operational power to and perform information processing on only resources used in the exclusive operational mode, when the information-processing device is started up from a designated said interface unit or said input/output device.

5. An information-processing device according to claim 1, characterized in having:
an operation system for said normal operation mode, and
an operation system for said exclusive operational mode;

6 the information-processing device therein being
7 configured to switch between said operation system for the
8 normal operation mode and said operation system for the
9 exclusive operational mode according to conditions for
10 starting-up from said power-off state and said suspend
11 state.

1 6. An information-processing device as set forth in
2 claim 5, characterized in that the designated said interface
3 unit is provided with a radio transmission-reception
4 function;

5 the information-processing device therein being
6 configured to set an exclusive operational mode flag when
7 the designated said interface unit via the radio
8 transmission-reception function receives a wake-up signal in
9 the suspend state, for causing a start-up process for said
10 operation system for said exclusive operational mode to be
11 carried out.

1 7. An information-processing device configured for
2 selectively use-enabling functional units thereof from
3 operationally stopped power-off or suspended states, the
4 information processing device comprising:

5 at least one interface section enabling a wake-up
6 instruction for starting-up the functional units of the
7 information-processing device from the power-off or
8 suspended states;

9 a man-machine interface;

10 a memory;

11 a processor; and

12 a chipset connecting the interface section, the man-
13 machine interface, the memory and the processor, said
14 chipset in cooperation with said memory and said processor
15 having a bus control function for bringing operational mode
16 of the information-processing device functional units when
17 started up from either said power-off state or said suspend
18 state into one of

19 a normal operational mode use-enabling the
20 functional units in their entirety including the man-
21 machine interface, and

22 an exclusive operational mode use-enabling some of
23 the functional units on starting up from either said
24 power-off state or said suspend state, including said
25 interface section having executed a wake-up
26 instruction, said memory, said processor and said
27 chipset; wherein

28 said interface section executing a wake-up
29 instruction selects between said normal operation mode
30 and said exclusive operational mode; and

31 when said exclusive operational mode is
32 terminated, the information-processing device goes to

one of said power-off state and said suspend state as its pre-start-up state.

8. An information-processing device configured with interface units, input/output devices, memory, a display unit and a central processing unit, connected by a chipset having a bus control function, wherein operational mode when the information-processing device is started up from either said power-off state or said suspend state being a normal operation mode use-enabling functions of the information-processing device in their entirety as information processing functions, or an exclusive operational mode use-enabling some functions of the information-processing device as information processing functions; the information-processing device therein characterized in that:

said normal operation mode and said exclusive operational mode are selected between according to start-up conditions.

9. An information-processing device as set forth in claim 8, characterized in that data changed in the exclusive operational mode and data change recognition flags indicating data has been changed are stored in a predetermined memory area different from a memory area for storing data used in the normal operation mode.

1 10. An information-processing device as set forth in
2 claim 8, characterized in that:

3 start-up time is shorter and power consumption is lower
4 for said exclusive operational mode than for said normal
5 operational mode; and further

6 said normal operation mode and said exclusive
7 operational mode are started up selectively or exclusively.

1 11. An information-processing device as set forth in
2 claim 8, characterized in being configured to select the
3 exclusive operational mode, and to supply operational power
4 to and perform information processing on only resources used
5 in the exclusive operational mode, when the information-
6 processing device is started up from a designated said
7 interface unit or said input/output device.

1 12. An information-processing device according to claim
2 8, characterized in having:

3 an operation system for said normal operation mode, and
4 an operation system for said exclusive operational
5 mode;

6 the information-processing device therein being
7 configured to switch between said operation system for the
8 normal operation mode and said operation system for the
9 exclusive operational mode according to conditions for
10 starting-up from said power-off state and said suspend
11 state.

13. An information-processing device as set forth in claim 12, characterized in that the designated said interface unit is provided with a radio transmission-reception function; the information-processing device therein being configured to set an exclusive operational mode flag when the designated said interface unit via the radio transmission-reception function receives a wake-up signal in the suspend state, for causing a start-up process for said operation system for said exclusive operational mode to be carried out.

14. A control method for an information-processing device configured with interface units, an input/output devices, a memory, a display unit and a central processing unit, connected by a chipset having a bus control function, characterized in that operational mode when the information-processing device is started up from either said power-off state or said suspend state goes into a normal operation mode use-enabling functions in their entirety as information processing functions, or into an exclusive operational mode use-enabling some functions as information processing functions; the control method therein including the step of: selecting between said normal operation mode and said exclusive operational mode according to start-up conditions.

1 15. An information-processing device control method as
2 set forth in claim 14, wherein:

3 said exclusive operational mode is selected according
4 to start-up conditions from a designated said interface unit
5 or said input/output device;

6 the control method therein further characterized in
7 including the step of executing information processing in
8 accordance with said start-up conditions.

1 16. An information-processing device control method as
2 set forth in claim 14, wherein:

3 the information-processing device has an operation
4 system for said normal operation mode, and an operation
5 system for said exclusive operational mode;

6 the control method therein further characterized in
7 including the step of control-switching between said
8 operation system for the normal operation mode and said
9 operation system for the exclusive operational mode
10 according to conditions for starting-up from said power-off
11 state and said suspend state.

1 17. A recording medium storing a control program for an
2 information-processing device configured with interface
3 units, input/output devices, memory, a display unit and a
4 central processing unit, connected by a chipset having a bus
5 control function, the control-program storing recording

6 medium characterized in that thereon is stored a control
7 program including:

8 a process for executing a normal operation mode use-
9 enabling functions of the information-processing device in
10 their entirety as information processing functions;

11 a process for executing an exclusive operational mode
12 use-enabling some functions of the information-processing
13 device as information processing functions; and

14 a process for selecting said normal operation mode
15 according to normal start-up conditions when the
16 information-processing device is started up from either a
17 power-off state or a suspend state, and for selecting said
18 exclusive operational mode according to start-up conditions
19 from a designated said interface unit or said input/output
20 device.

1 18. An information-processing device configured with
2 interface units, input/output devices, memory, a display
3 unit and a central processing unit, connected by a chipset
4 having a bus control function, characterized by:

5 means for executing a normal operation mode use-
6 enabling functions of the information-processing device in
7 their entirety as information processing functions;

8 means for executing an exclusive operational mode use-
9 enabling some functions of the information-processing device
10 as information processing functions; and

11 means for selecting said normal operation mode
12 according to normal start-up conditions when the
13 information-processing device is started up from either a
14 power-off state or a suspend state, and for selecting said
15 exclusive operational mode according to start-up conditions
16 from a designated said interface unit or said input/output
17 device.